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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,173	02/28/2002	Ulrich Adams	32860-000203/US	9536
30596	7590	07/28/2005	EXAMINER	
HARNES, DICKEY & PIERCE, P.L.C. P.O.BOX 8910 RESTON, VA 20195			SENF, BEHROOZ M	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/980,173	Applicant(s) ADAMS, ULRICH	
	Examiner Behrooz Senfi	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant amendment (filed 5/13/2005) canceled claims 1 – 7 and added new claims 8 – 18.

Applicant's arguments (remarks, filed 5/13/2005) with respect to claim 1 have been considered but are moot in view of the new application of Dailey (US 5,164,826).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8 – 9, are rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey (US 5,164,826).

Regarding claim 8, Dailey '826 teaches a "remote controlled inspection device for an annular combustion chamber of a turbine" (i.e. fig. 2, abstract, col. 1, lines 45 – 46), and "remotely steerable drive mechanism" reads on (remote controlling the carriage, abstract, lines 4 – 5), and "moveable video camera" reads on (i.e. fig. 3, camera 29, col. 2, lines 34 – 35) and "lighting arrangement" (i.e. col. 5, lines 66 – 68) and "transmitting video means" reads on (i.e. col. 7, lines 25 – 28), and "carrying framework for the video camera, for the drive mechanism and for the lighting arrangement, including lower frame and an upper frame" (i.e. fig. 1, carrying framework 33), and "a plurality of wheels being mounted on the frames for moving the carrying framework along the inner

internal wall portion and outer internal wall portion of the annular combustion chamber” (i.e. fig. 1, carrying framework 33, includes wheels for carrying the camera along the wall portion of the annular turbine, it is noted that the carrying framework 33 can be placed in either side of the wall portion of the turbine). Dailey ‘826 does not particularly mentioned “gas turbine” as cited in the preamble of claim 8. However, Dailey ‘826 teaches device and techniques for inspecting internal features of the turbine in general. Therefore, would have been obvious to one skilled in the art to use the same techniques as taught by Dailey ‘826 for inspecting gas turbine. Since it is another area that is not accessible for human inspection.

Regarding claim 9, Dailey ‘826 teaches, “drive mechanism includes an electric motor and wheels” (i.e. fig. 2, abstract, lines 8 – 10).

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey ‘826 in view of Tolino et al (US 4,654,702).

Regarding claim 10, Dailey ‘826 teaches a “remote controlled inspection device For an annular combustion chamber of a turbine with remote steerable drive mechanism and carrying framework 33, includes wheels for carrying the camera along the wall portion of the annular turbine” as discussed above with respect to claim 8.

Dailey ‘826 does not specifically show “four wheels are mounted on the lower frame and an upper frame” as claimed in claim 10.

However such features are well known and used in the prior art of the record as evidenced by Tolino ‘702 (i.e. fig. 2, shows the carriage with four wheels, 34, 36 and 95). Taking the combined teaching of Dailey ‘826 and Tolino ‘702 as a whole, it would

have been obvious to one skilled in the art at the time of the invention was made to improve the structure of carrying framework 33 of Dailey, as taught by Tolino for a better support and movement.

5. Claims 11 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey '826 in view of Qureshi et al (US 5,956,077).

Regarding claim 14, the limitations claimed are substantially similar to claim 8, and are covered in the above.

Dailey '826 does not explicitly teach, "self supported c-shaped rail as shown in fig. 3 of the present application". However such features are well known and used in the prior art of the record as evidenced by Qureshi '077 (i.e. fig. 4, arms 31 – 33, which are self supported and adjustable to different shape and position). Therefore it would have been obvious to one skilled in the art at the time of the invention was made to incorporate the self supporting flexible arm as taught by Qureshi '077 in Dailey's compact robotic device, for the purpose of more flexibility and difficult access locations.

Regarding claim 15, the limitation "telescopically extendable" does not carry any patentable weight, and are well known and used in the conventional art. Examiner takes Official Notice for the above feature.

Regarding claims 11 - 12, combination of Dailey '826 and Qureshi '077 teaches, "translational rail mounted on an end face of the inspection device, wherein video camera and lighting arrangement are mounted on the translational rail, in claims 11 - 12" (i.e. figs. 4 and 8, lighting 49 – 50 and camera 48).

Regarding claim 13, the claimed "articulated fork arm that held the video camera and lighting" (i.e. fig. 4, arm 33).

Regarding claims 16, combination of Dailey '826 and Qureshi '077 teaches, "supporting C-shaped rail enables navigation of the combustion chamber without the need to contact the surface" (i.e. fig. 4, arm 31 – 41, of Qureshi).

Regarding claims 17 - 18, the limitations claimed are substantially similar to claims 14 and 16, therefore the grounds for rejecting claims 14 and 16 also applies here.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications

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from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(571) 272-7339**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mehrdad Dastouri** can be reached on **(571) 272-7418**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:


(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. M. S. 

7/25/2005


RICHARD LEE
PRIMARY EXAMINER